

**ULTRABASS**

**BXL450/BXL900/BXL1800/BXL3000/BXL450A/BXL900A/BXL1800A/BXL3000A**



[www.behringer.com](http://www.behringer.com)

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# User's Manual

Version 1.1 December 2005



**IMPORTANT SAFETY PRECAUTIONS**

**CAUTION:** To reduce the risk of electric shock, do not remove the top cover (or the rear section). No user



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure—voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual.



## FOREWORD



Dear Customer,

Welcome to the team of BEHRINGER users, and thank you very much for expressing your confidence in us by purchasing the BEHRINGER ULTRABASS.

Writing this foreword for you gives me great pleasure, because it represents the culmination of many months of hard work delivered by our engineering team to achieve a very ambitious goal: to present you with an outstanding range of Bass Workstations that

is at the forefront of what is technically possible and that offers you a vast variety of sound shaping options.

The task of designing our new ULTRABASS amps certainly meant a great deal of responsibility, which we assumed by focusing on you, the discerning user and musician. Meeting your expectations also meant a lot of work and night shifts. But it was fun, too. Developing a product usually brings a lot of people together, and what a great feeling it is when all who participated in such a project can be proud of what they've achieved.

It is our philosophy to share our enjoyment with you, because you are the most important member of the BEHRINGER team. With your highly competent suggestions for new products you've made a significant contribution to shaping our company and making it successful. In return, we guarantee you uncompromising quality as well as excellent technical and audio properties at an extremely reasonable price. All of this will enable you to give free rein to your creativity without being hampered by budget constraints.

We are often asked how we manage to produce such high-quality devices at such unbelievably low prices. The answer is quite simple: it's you, our customers! Many satisfied customers mean large sales volumes enabling us to get better purchasing terms for components, etc. Isn't it only fair to pass this benefit on to you? Because we know that your success is our success too!

I would like to thank all of you who have made the ULTRABASS Series possible. You have all made your own personal contributions, from the developers to the many other employees at this company, and to you, the BEHRINGER user.

My friends, it's been worth the effort!

Thank you very much,

Uli Behringer

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## 1. INTRODUCTION

Congratulations! With this amplifier from our ULTRABASS Series you have purchased a state-of-the-art Bass Workstation that sets new standards. The ULTRABASS is an extremely powerful 2-channel bass amp equipped with genuine BUGERA™ speakers. It gives you loads of power and makes sure that you always have a few extra watts available whenever you need them. The other items on the list of features are no less impressive: The ULTRABASS has one clean and one distortion channel plus one equalizer with a ground-breaking "see-what-you-play" FBQ frequency display, which immediately shows you which bass frequency is assigned to which control—the perfect solution for sound tuning as you play. A musical limiter circuit protects the unit effectively against distortion, even at maximum volume. The connectors for headphones and CD players are ideal for practicing.

-  **This user's manual will allow you to familiarize yourself with the control elements of your new ULTRABASS and learn all of its functions. After reading this manual, store it where you can easily find it for future reference.**

### 1.1 Before you get started

#### 1.1.1 Shipment

The ULTRABASS was carefully packed at the assembly plant to ensure secure transport.

If the cardboard box is damaged, please inspect the ULTRABASS equipment immediately for physical damage.

-  **Damaged equipment should NEVER be sent directly to us. Immediately inform the dealer from whom you acquired it as well as the transportation company from which you took delivery. Otherwise, all claims for replacement/repair may be rendered invalid.**
-  **If the unit needs to be shipped, please always use the original packaging to avoid damage.**
-  **Never let unsupervised children play with the device or with its packaging.**
-  **Please dispose of all packaging materials in an environmentally-friendly fashion.**

#### 1.1.2 Initial operation

Please make sure that your ULTRABASS is provided with sufficient ventilation, and never place it on other amplifiers or in the vicinity of a heater to avoid the risk of overheating.

-  **Before plugging your ULTRABASS into a power socket, please make sure you have selected the correct voltage:**

The fuse retainer near the power cord connector has three triangular markings. Two of these triangles point in opposite directions. Your ULTRABASS is set up for the voltage indicated near these markings, and can be altered by turning the fuse mount by 180 degrees. **ATTENTION: This does not apply to export models built for 120 V, for example!**

-  **If you use your ULTRABASS unit with a different voltage, you must change the fuses accordingly. The correct value of the fuses needed can be found in the section "SPECIFICATIONS".**

-  **Faulty fuses must be replaced with fuses of appropriate rating, without exception! The correct value of the fuses needed can be found in the section "SPECIFICATIONS".**

Power is delivered via the cable that was delivered with the ULTRABASS. All mandatory safety precautions have been adhered to.

-  **Please make sure that all of your equipment is grounded at all times. For your own protection, you should never tamper with the grounding of the cable or the unit itself. The unit shall always be connected to a mains socket outlet with a protective earthing connection.**

#### 1.1.3 Online registration

Please, do remember to register your new BEHRINGER equipment right after your purchase by visiting [www.behringer.com](http://www.behringer.com) (alternatively [www.behringer.de](http://www.behringer.de)) and kindly read the terms and conditions of our warranty carefully.

Should your BEHRINGER product malfunction, our goal is to have it repaired as quickly as possible. To arrange for warranty service, please contact the retailer from whom the equipment was purchased. Should your BEHRINGER dealer not be located in your vicinity, you may directly contact one of our subsidiaries. Corresponding contact information is included in the original equipment packaging (Global Contact Information/European Contact Information). Should your country not be listed, please contact the distributor nearest you. A list of distributors can be found in the support area of our website ([www.behringer.com](http://www.behringer.com)).

Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently.

Thank you for your cooperation!

## **ELEMENTS CTIONS**



### *section*

ear to this input jack on the

the input gain on channel 1.

switch over between the two channels. It turns up when channel 2 has been selected. On models BXL1800, BXL3000, the channels can also be selected by remote control, supplied with the unit.

The degree of distortion of the signal can be controlled by turning the control clockwise, starting from the position.

This control is used for personal sound design. It is used for shaping your bass sound. The function of the Shape function can be found in the chapter "Effects".

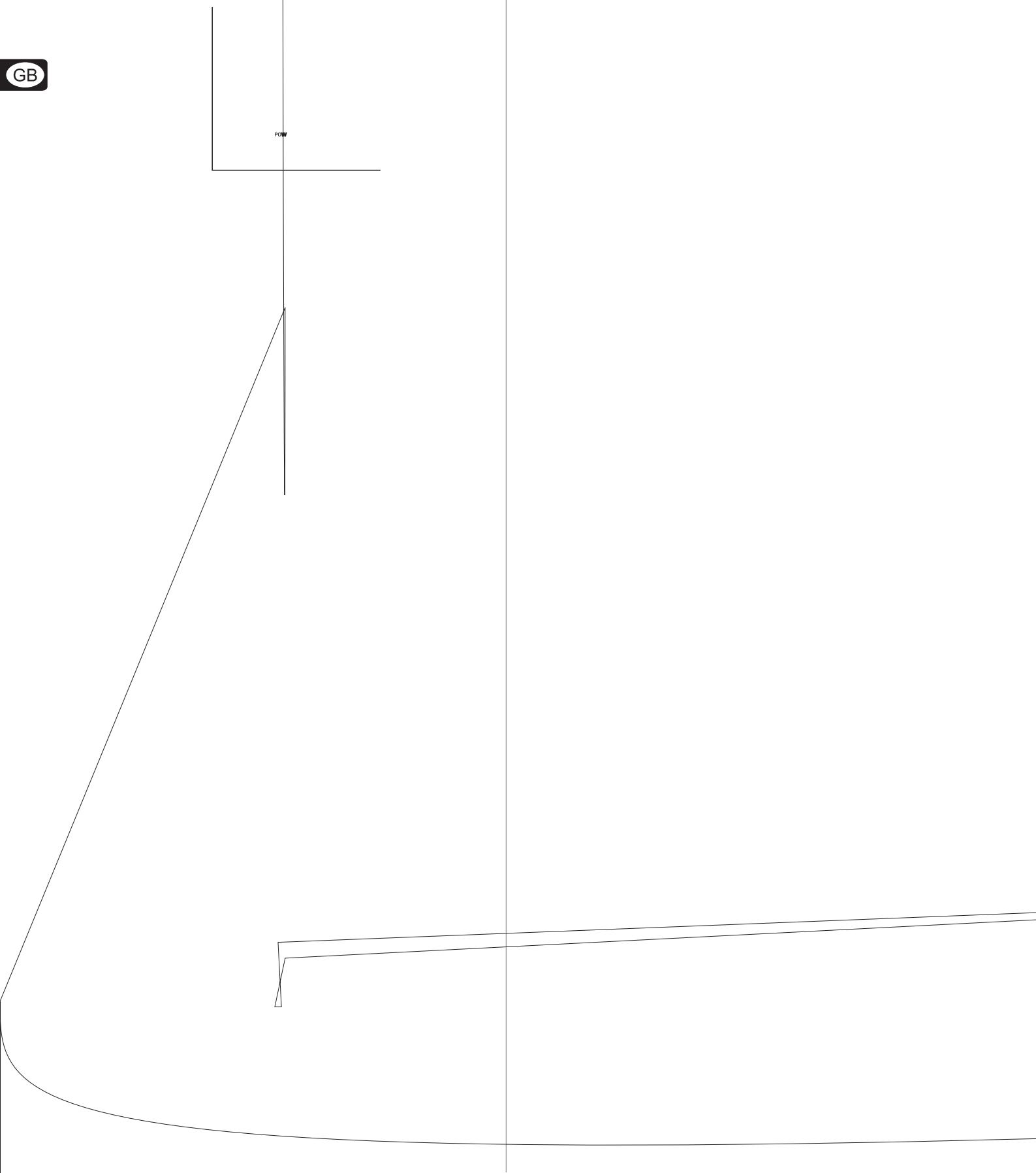
**active on channel 2. The volume of channel 2 is unprocessed.**

control the volume of channel 2. It is used to balance in volume that you want to have.



[18] The models BXL1800, BXL3000, BXL1800A and BXL3000A have a dual foot switch included. Connect the foot switch to the *FOOT SW(ITCH)* jack. Use the foot switch to select a channel (corresponds to the *CH 2* button [3]) and to activate the Ultrabass function (corresponds to the *ON* button [24]).

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# ULTRABASS BXL450A/BXL900A/BXL1800A/BXL3000A

## 3.2.2 The Shape function

The Shape function on your ULTRABASS provides a revolutionary type of filter that you can use to modify your bass sound completely. The filter allows you to shape your sound – which is a must for bass players today. Extreme filter settings will give your bass sound more punch, for example:

You want to play a live bass solo but the sound doesn't cut through. The solo should stand out, rather than being drowned. First, set up a solid basic sound on channel 1. Then, create a very distinctive solo sound on channel 2 using the Shape filter. Since the Shape filter is only effective on channel 2, you can change sounds quickly and easily before you begin your solo.

The Shape filter is worth its weight in gold when you are using two different bass guitars. Maybe you want to change from one instrument to another with a completely different sound. During gigs you often lack the time to set up your amp for a different instrument. Because you can use channel 1 for one instrument and channel 2, with its Shape filter, for another instrument, you'll be glad to have the ULTRABASS.

## 3.2.3 The Ultrabass function (not available on BXL450 and BXL450A)

In current music production, extremely low bass sounds that are one octave below the lowest available bass guitar frequency are quite popular. Often, you can only create this sound in studios, because most bass amplifiers have no sub-harmonics function. This is not true with the ULTRABASS. The Ultrabass processor gives you the ultimate tool to shape this contemporary sound.

You'll be amazed to hear how deep your bass can sound with the Ultrabass function. Extreme settings can be particularly interesting if you want to give your sound added sparkle in the treble range. By the way, if you already set the Shape filter to create punchy sounds, but feel that there's not enough power in the bass range, the sub-harmonics processor is there to help you. Even if the sound is still punchy, it will have much more depth.

On the models BXL1800, BXL3000, BXL1800A and BXL3000A, the Ultrabass function can easily be switched on and off via the foot switch supplied. This allows you to highlight certain passages exclusively.

## 3.2.4 The compressor (only BXL1800/BXL3000 and BXL1800A/BXL3000A)

A compressor is used to limit the dynamic range of a signal. Signal peaks are lowered and soft signals are raised in volume, thus reducing the difference between the highest and the lowest signal levels. The result is a much more powerful sound.

Some playing techniques, such as slapping, lead to high-level differences. In this case, a compressor can be used to make the low-level dead notes clearly audible, which gives the bass line even more groove. What is more, the sustain of long notes is extended.

- ▲ Use the ON switch [22] to activate the compressor.
- ▲ Turn the COMPRESSOR control [21] slowly to the right to raise the compression intensity.
- ▲ Press the ON switch to compare the compressed signal with the unprocessed one.

Compressors work best if provided with high input signals. If the signal level is low, the effect will be activated only with high settings. If so, enabling the compressor can lead to extreme level differences. If GAIN is high, the compressor comes in quite early. In this case, you don't need to turn up the COMPRESSOR control that far to achieve an effect. Experiment with it to find the best setting for your needs!

**☞ The compressor works independently of the built-in protective limiter, which is always active on all BXL models and protects the power stage from overloading and distortion.**

## 4. WIRING EXAMPLES

### 4.1 Setup for practicing with playbacks

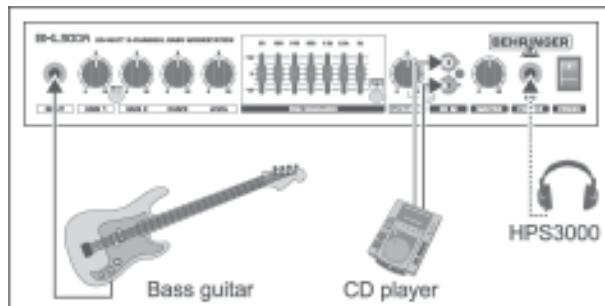


Fig. 4.1: Standard setup (here: BXL900A)

This setup is intended for rehearsals or practicing at home. Connect the ULTRABASS as shown in fig. 4.1. To feed in playbacks, connect a CD player to the CD input. Of course, you can also connect an MD player or a computer.

If you want to practice with headphones, just plug your headphones in the PHONES jack. The built-in loudspeaker will be muted automatically. Turn the MASTER control fully left before you connect the headphones.

### 4.2 Expanded setup for gigs and studio recordings (only BXL1800, BXL3000, BXL1800A and BXL3000A)

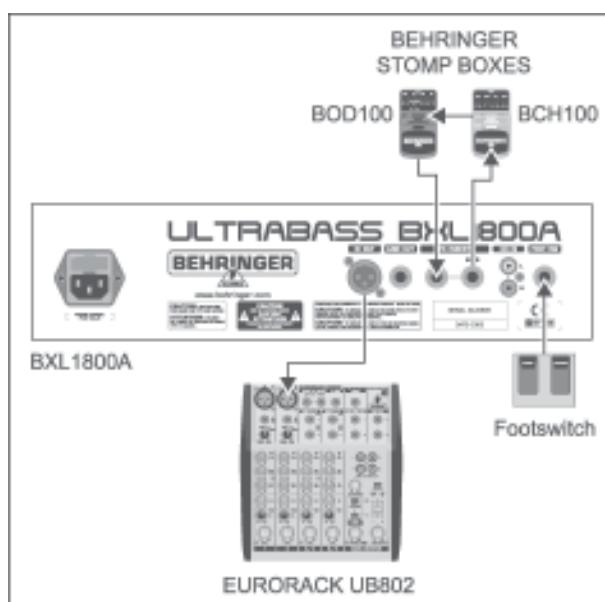


Fig. 4.2: Expanded setup (here: BXL1800A)

The following wiring scheme is recommended for live gigs or studio work. It builds on the standard setup.

Connect the foot switch supplied with the unit to the FOOT SWITCH jack on the ULTRABASS. Use the foot switch to switch channels and to activate the Ultrabass function, which is particularly useful when playing live.

To use an external effects device, connect the input of the effects unit to the FX INSERT SEND on the ULTRABASS, and the output of the effects device to the FX INSERT RETURN. Instead of the floor effects shown here, you can also use a wah-wah pedal or an external 19" effects unit.

If you want the bass signal to go through a PA system during live gigs, you would normally need a DI box. (DI boxes process the signals for long cables and provide a higher output level at the mixing console). The ULTRABASS amps have a DI box already built in! Connect the balanced DI OUT directly to the mixing console input or to the multi-core cable leading to the console. Use a microphone cable (2-core shielded cable with XLR connectors).

Alternatively, you can use the LINE OUT (1/4" TS jack) for short cables and mixing consoles with line-AS:es with wou

OUT!ü0IAUAMorAS:eading inAS'ading or homSM?U'EUse studioAS:es H-SMoüH



## 7. WARRANTY

### § 1 OTHER WARRANTY RIGHTS AND NATIONAL LAW

1. This warranty does not exclude or limit the buyer's statutory rights provided by national law, in particular, any such rights against the seller that arise from a legally effective purchase contract.
2. The warranty regulations mentioned herein are applicable unless they constitute an infringement of national warranty law.

### § 2 ONLINE REGISTRATION

Please do remember to register your new BEHRINGER equipment right after your purchase by visiting [www.behringer.com](http://www.behringer.com) (alternatively [www.behringer.de](http://www.behringer.de)) and kindly read the terms and conditions of our warranty carefully. Registering your purchase and equipment with us helps us process your repair claims quicker and more efficiently. Thank you for your cooperation!

### § 3 WARRANTY

1. BEHRINGER (BEHRINGER International GmbH including all BEHRINGER subsidiaries listed on the enclosed page, except BEHRINGER Japan) warrants the mechanical and electronic components of this product to be free of defects in material and workmanship for a period of one (1) year\* from the original date of purchase, in accordance with the warranty regulations described below. If the product shows any defects within the specified warranty period that are not excluded from this warranty as described under § 5, BEHRINGER shall, at its discretion, either replace or repair the product using suitable new or reconditioned parts. In the case that other parts are used which constitute an improvement, BEHRINGER may, at its discretion, charge the customer for the additional cost of these parts.
2. If the warranty claim proves to be justified, the product will be returned to the user freight prepaid.
3. Warranty claims other than those indicated above are expressly excluded.

### § 4 RETURN AUTHORIZATION NUMBER

1. To obtain warranty service, the buyer (or his authorized dealer) must call BEHRINGER (see enclosed list) during normal business hours **BEFORE** returning the product. All inquiries must be accompanied by a description of the problem. BEHRINGER will then issue a return authorization number.
2. Subsequently, the product must be returned in its original shipping carton, together with the return authorization number to the address indicated by BEHRINGER.
3. Shipments without freight prepaid will not be accepted.

### § 5 WARRANTY REGULATIONS

1. Warranty services will be furnished only if the product is accompanied by a copy of the original retail dealer's invoice. Any product deemed eligible for repair or replacement under the terms of this warranty will be repaired or replaced.
2. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national

or local level, in any country which is not the country for which the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in materials or workmanship. The warranty does not cover any such modification/adaptation, irrespective of whether it was carried out properly or not. Under the terms of this warranty, BEHRINGER shall not be held responsible for any cost resulting from such a modification/adaptation.

3. Free inspections and maintenance/repair work are expressly excluded from this warranty, in particular, if caused by improper handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, crossfaders, potentiometers, keys/buttons, tubes, guitar strings, illuminants and similar parts.

4. Damages/defects caused by the following conditions are not covered by this warranty:

- ▲ improper handling, neglect or failure to operate the unit in compliance with the instructions given in BEHRINGER user or service manuals.
- ▲ connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used.
- ▲ damages/defects caused by force majeure or any other condition that is beyond the control of BEHRINGER.

5. Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the warranty.

6. If an inspection of the product by BEHRINGER shows that the defect in question is not covered by the warranty, the inspection costs are payable by the customer.

7. Products which do not meet the terms of this warranty will be repaired exclusively at the buyer's expense. BEHRINGER will inform the buyer of any such circumstance. If the buyer fails to submit a written repair order within 6 weeks after notification, BEHRINGER will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.

### § 6 WARRANTY TRANSFERABILITY

This warranty is extended exclusively to the original buyer (customer of retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc.) shall be entitled to give any warranty promise on behalf of BEHRINGER.

### § 7 CLAIM FOR DAMAGES

Failure of BEHRINGER to provide proper warranty service shall not entitle the buyer to claim (consequential) damages. In no event shall the liability of BEHRINGER exceed the invoiced value of the product.

\* Customers in the European Union please contact BEHRINGER Germany Support for further details.

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